## PART I: JOINT STATEMENT OF CONCLUSIONS AND RECOMMENDATIONS

## INTRODUCTION \_

During the symposium, a bilateral Working Group and representatives from the Japanese Embassy met at the request of the Federal Emergency Management Agency (FEMA) to integrate the symposium presentations and discussions into a formal statement of conclusions and recommendations. Representatives to the Working Group from Japan included the National Land Agency, the Japan Fire and Disaster Management Agency, the Japan Metereological Agency, the Public Works Research Institute of the Ministry of Construction, and the Science and Technology Agency. Representatives from the United States included the National Science Foundation, the National Institute of Standards and Technology, the United States Geological Survey, and FEMA.

The Joint Statement of Conclusions and Recommendations is the formal outcome of the symposium and will serve as the reference for future United States-Japan cooperation on earthquake policy under the Common Agenda for Cooperation in the Global Perspective.

## JOINT STATEMENT OF CONCLUSIONS AND RECOMMENDATIONS

The following Joint Statement of Conclusions and Recommendations was approved unanimously by the U.S. and Japanese participants at the end of symposium on September 18, 1996.

- 1. This U.S.-Japan Earthquake Policy Symposium is one of the first thrusts under the *Natural Disaster Reduction Initiative* added by President Clinton and Prime Minister Hashimoto to the U.S.-Japan Common Agenda for Cooperation in the Global Perspective in April, 1996.
- 2. The First U.S.-Japan Earthquake Policy Symposium provided the forum to exchange valuable policy and technical information that is beneficial to both countries. The Symposium is an outgrowth from the discussions between then-Prime Minister Murayama and President Clinton held in June 1995. Twenty-five senior level persons from each country discussed methods to better exchange knowledge about earthquake emergency management (mitigation, preparedness, response, and recovery) and research and development. FEMA is the U.S. chair and the National Land Agency (NLA) is the Japan chair. FEMA and NLA will take the lead in future earthquake policy discussions between the two countries.
- 3. This Symposium provided a foundation for the exchange of views on public policies and private activities and programs and the supporting science and engineering technologies related to earthquake emergency management. The participating organizations will continue to promote and enhance public safety and community welfare by fostering improved public policies and programs and their supporting research and development.
- 4. Participants discussed a wide range of topical areas where significant advances have been made by both countries, cooperative activities that could improve each country's earthquake emergency management policies and programs, and applications of research and technology. Examples include:

- a. Improving governmental policies and programs and private sector activities for providing emergency response, immediate post-disaster assistance to the affected population, and development of effective earthquake hazard mitigation strategies.
- b. Performing joint post-disaster investigations to identify mitigation opportunities to avoid future losses.
- c. Developing scientific knowledge and engineering technologies leading to such mitigation measures as improved land use and construction practices in new and existing buildings and lifelines to improve earthquake resistance.
- d. Performing joint risk assessments and quick evaluation of damage following earthquakes.
- e. Sharing information on topics such as earthquake forecasting and warning and hazard zonation mapping.
- f. Improving emergency communication systems for information exchange that will remain functional during disasters.
- g. Establishing a quick decision-making and integrated response system to disaster situations.
- h. Developing inter- and intra-governmental and non-governmental information systems that will contribute timely and effective assistance to disaster victims.

The participants recognized the importance of expanding the collaboration between the two countries in these and other related areas in order to achieve significant reduction in future earthquake losses.

- 5. The participants proposed the following areas for future cooperation:
  - a. Develop and exchange information on:
    - improved earthquake warning, earthquake emergency response, recovery and mitigation policies, programs, and procedures.
    - use of urban planning and development policies and practices to achieve earthquake hazard reduction.
    - methods for the accurate assessment of the severity of the disaster that will enable proper and quick response.
    - advanced search and rescue and fire fighting techniques.

- improved programs to assist communities in their recovery from disasters and exchange of this new knowledge.
- improved seismic vulnerability assessment and strengthening technologies for buildings, structures, and lifeline systems, including use of new materials and large-scale testing, and development of recommendations for design guidelines, standards, and practices.
- effective means to exchange policy and technical personnel and data following earthquakes.
- risk assessment and emergency management for mega-cities.

## b. Improve:

- real-time earthquake monitoring and warning, probabilistic forecasting, and earthquake hazard mapping.
- techniques for hazard, damage, and risk assessments for buildings, structures, and lifeline systems.
- earthquake loss estimation models to stimulate preparedness and mitigation actions and facilitate emergency response following earthquakes.
- public policies and mechanisms to assess critical facilities, public works, and utilities for earthquake vulnerability and to strengthen their seismic resistance.
- 6. The participants, acknowledging the achievements of this Symposium, concluded that:
  - a. a second Earthquake Policy Symposium will be held.
  - b. a "U.S.-Japan High Level Forum for Earthquake Emergency Management Policy Cooperation" will be established, acknowledging the importance of continuing cooperation after the second Symposium.
  - c. a working group will be formed, to be co-chaired by FEMA and NLA, to provide a mechanism to promote and encourage implementation of the conclusions and recommendations of this Symposium.
- 7. The working group led by FEMA/NLA will:
  - a. monitor and coordinate activities coming out of this Symposium, and report on their status at the second Symposium.

- b. promote and develop proposals for cooperative projects to be presented for consideration at the second Symposium.
- c. develop and report the modality, terms of reference, and other details of the High Level Forum at the second Symposium.
- 8. The participants concluded that they will explore implementation of collaborative efforts resulting from this Symposium in cooperation with the new U.S./Japan Earthquake Disaster Mitigation Partnership, the Pan-Pacific Natural Disaster Watch Network, and other natural disaster programs.
- 9. The participants will explore the possibility of pursuing wider cooperation through several means, including, but not limited to, the conduct of joint workshops on topics of mutual interest; exchange of policy-level officials and technical experts on a short-term basis; perform joint research to improve knowledge; exchange of scientific and engineering equipment to perform experiments; and exchange of policy, program, and technical information that will bring into realization improved earthquake preparedness, response, recovery, and mitigation.
- 10. Information and data derived from the cooperative activities will be made available to the public. Dissemination of the information and data will be executed through media, including, but not limited to, publications, talks, electronic means such as E-mail and the World Wide Web, and other information processes customarily used by the participating organizations.
- 11. The Symposium participants will continue to contribute to the International Decade for Natural Disaster Reduction (IDNDR) by such means as exchanging relevant proceedings of joint meetings with their respective National Committees for the IDNDR. Consistent with the objectives of the Common Agenda, it is important that the report of and achievements resulting from the Symposium be shared with all countries vulnerable to earthquakes.
- 12. The second U.S.-Japan Earthquake Policy Symposium will be held in Japan in 1997. The specific program and itinerary will be proposed by the Japan-side chair with concurrence of the U.S.-side chair.